

REMARKS

The claims are amended herewith in an effort to overcome the rejection under 35 U.S.C. § 112. Claim 34 is amended to substitute the word “system” for “evaluation device”, to agree with the antecedent term “system” at line 1 of claim 34.

The Examiner has objected to the use of the term “not substantially more than about” in the claims. Accordingly, the claims are amended herewith to modify this terminology in all of the claims. Thus, claim 1, for example, now calls for the height dimension to be “about 4 times the smaller cross-sectional dimensioned of the smallest dimension bill to be identified by said device”.

The support for the various dimensions stated in the claims has been set forth in the Applicant’s response mailed December 4, 1998, paper no. 5 and is incorporated herein by reference. The cases cited therein, including *Andrew Corp. v. Gabriel Electronics, Inc.*, 6 U.S.P.Q. 2d 2010 (Fed. Cir. 1988) and *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 U.S.P.Q. 303, 316 (Fed. Cir. 1983), cited in support of the terms “substantially” and “about” in the claims, in the response mailed December 4, 1998, paper no. 5, are also hereby incorporated by reference.

The *Amgen* case (18 USPQ2d 1016) cited by the Examiner does not stand for the proposition that the term “about” renders a claim indefinite. Rather, in the *Amgen* case, the limitation in question was “at least about 160,000”. This had been substituted by amendment for the claim language “at least 120,000” in response to citation of a reference which disclosed an amount of 128,620. The Court found that the addition of the word “about” appeared to constitute “an effort to recapture a mean activity somewhere between 120,000 which the patent examiner found was anticipated by the prior art and 160,000 claims which were previously allowed.” (i.e. claims without the limitation “about”). Moreover, in *Amgen*, the Federal Circuit specifically stated: “in arriving at this conclusion, we caution that our holding that determines “about” renders indefinite claims 4 and 6 should not be understood as ruling out any and all uses of this term in patent claims. It may well be acceptable and appropriate fact situations.” (Citing *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 U.S.P.Q. 303, 316 (Fed. Cir. 1983).

It is submitted that in the present instance, the art of record does not teach or suggest any particular sizes or dimensions of devices, let alone dimensions close to those claimed by applicant, such that use of the term "about" or "substantially" is submitted to be appropriate in these claims and does not fall within the situation addressed in the *Amgen* decision. In fact, it is submitted that the *Amgen* decision with its favorable citation of *W.L. Gore & Associates, Inc. v. Garlock, Inc.* further supports the propriety of the use of these terms in the present application.

35 USC § 103 Rejections

In support of the use of the phrase "design choice", the Examiner cites *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USQP 232 (1984) wherein it was found that the device having the claimed dimensions would not perform differently than the prior art device. It is submitted that this is not the case in the present application. The manner in which applicant's device performs differently from prior art devices not having relatively small dimensions is set forth in the background of the invention at page 2, lines 18-28 which, as pointed out in the prior response, establishes the drawbacks of large size machines and the need for smaller size machines for use in confined areas such as teller areas. See also the objects of the invention at page 9, lines 25-31 of the applicant's specification, which state the object of providing a compact apparatus. Thus, in this respect larger machines of the prior art would not perform in the same manner as the claimed device.

Moreover, and referring to the cited references, the Examiner refers primarily upon the Roes et al. patent (U.S. Patent 4,587,434). However, the Roes et al. patent is fatally flawed as a reference for the fundamental reason that all of applicant's claims call for a housing, and for the relative depth, width, height and dimensions of the housing (with the exception of claim 18 which defines the compact nature of the device by the relatively short length of its transport path; however, even claim 18 calls for a housing). It is clear that the Roes et al. patent does not show or suggest any housing whatever. The newly cited secondary reference Nao et al. (U.S. Patent No. 4,487,306) clearly leads away

from the provision of the relatively compact size as called in for in applicant's claims. See, for example, the large size of the housing or cabinet and the large size of the overall device as illustrated in FIG. 2 of Nao et al.

Regarding the detailed statements of rejections of the claims, these are substantially identical to the statements of reasons for rejections given in the first Office Action. Applicant's response, paper no. 5, mailed December 4, 1998 responded to each of these grounds of rejection, and those responses are incorporated herein by reference, and stand unrebutted. The only difference is in the shifting of some of the claims to a rejection under 35 USC 103 citing the secondary reference Nao et al. However, this reference is apparently cited only for provision of the storing portion or "safe" as an "output bin" mounted to the housing of an automatic deposit machine and therefore adds nothing to the Roes et al. reference suggestive of the features urged in support of the claims in Applicant's prior response. As noted above, the Nao et al. reference actually leads away from Applicant's claimed invention since it shows (see FIG. 2) a relatively large device, housed in a relatively large housing.

As also pointed out in the Applicant's prior response, all of Applicant's 1-35 claims call for a currency evaluation device which identifies currency bills of different denominations. The Roes et al. patent does not disclose or suggest such a device. The Roes et al. disclosure is limited to validation of currency bills, which is neither the same as nor suggestive of identifying different denominations of bills. The newly cited Nao et al. reference appears to be capable of pattern recognition and identification of the bills; however, as pointed above, the Nao et al. reference actually teaches away from applicant's claims drawn to a compact currency evaluation device.

Regarding claims 34 and 35, it is noted that neither the Roes et al. or Nao et al. reference contains any teaching or suggestion of identifying bills of different denominations of a plurality of currency systems, including a memory for storing master characteristic information associated with at least one genuine bill from each of at least two currency systems. The Roes et al. reference is silent on this point, while the Nao et al. reference appears to describe only the discriminating of the truth or falsity and or the kind of bill for Japanese currency. Nao et al. does not appear to teach or suggest handling

bills of other currency systems or to suggest a master pattern memory which stores master patterns for at least one genuine bill from at each of at least two currency systems. In this regard, Nao et al. at column 5, lines 44 and following, states the specific locations and distances between various sensor elements for the case where the apparatus is designed “to treat 500 yen to 10,000 yen bills (Japanese monetary units)”. This implies that the mechanical components of the device must be actually reconstructed and rebuilt in order to accommodate bills from other currency systems therefore also leading away from claims 34 and 35. Thus, claims 34 and 35 are submitted as patentable over the applied references.

The Examiner has stated that the Roes et al. disclosure states that the apparatus can be modified to accept currency notes from various countries. Clearly, applicant's claims 34-35 call for a machine which is capable, without modification of identifying currency bills of different currency systems and having a memory which stores, without modification, characteristic information associated with at least one genuine bill from each of at least two currency systems. Moreover, even if modified is suggested, the Roes et al. device would still operate with respect to currency bills from only one currency system at any given time, and would never in any case, with or without such modifications, operate to accept bills from more than one currency system, as claimed by Applicant in claims 34 and 35.

The Examiner has further stated that “validating the authenticity of a currency note inherently means that the device is provided for identifying bills”. This simply is untrue. Authenticating bills is a completely different function from identifying bills, and this is clearly explained in Applicant's disclosure among other places. If the functions were one and the same the Nao et al. patent would not describe determining both “the truth or falsity of the bill” and “the kind of bill”.

Regarding applicant's claims directed to the operating speed of the device, the teaching in Roes et al. of processing a currency note “in less than two seconds” cannot be interpreted as a teaching of the device made process note in as little as 0.06 seconds as suggested by the Examiner. No one of ordinary skill in the art set forth in 35 U.S.C. §103 would interpret this teaching in this manner. The Examiner suggests “using an AC high

speed motor instead to generate an appropriate transport speed". However, the Examiner has not cited any reference to support this suggested modification of the Roes et al. device.

In the present Office Action, in the "Detailed Action" at page 2, under paragraph A1, the Examiner suggests that the Applicants "contradictorily assert" that the distance between the axis of rollers 223, 241 can be approximated as 2.3 inches and later that the distance between these elements is approximately 1.5 inches. There is no contradiction here. The first statement is a statement of the actual dimension, while the second statement is a statement of the dimension as shown in applicant's drawing, which is to a scale smaller than 1:1.

The Examiner's initial statement at paragraph A2 at the top of page 3 is not understood:.

"Fig. 20 illustrates that rollers 223 and 241 are not in the same axe (sic), thus the distance between them is incompatible to the width or the smaller cross-sectional dimension of the bill which is fed downward after being stripped by the rollers 220 as shown in this claimed figure."

While the meaning of this statement is not clear, applicant's description states at page 65, lines 17-25, the distance between the axes of these two rollers is "just short of" the narrow dimension of the currency bills. This is so that at least one of the two rollers will be contacting and driving the bill through applicant's transport mechanism at any given time. This is not related to the longer dimension or length of the bill which, of course, would be accommodated by the spacing of rollers located on the same shaft or axis.

With respect to Examiner's paragraph B4, while the quoted portion of applicant's claims calls for "retrieving characteristic information for one or more bills," applicant's claims also call for signal processing means for comparing the retrieved information with master information and for "generating an indication of the identity of said bill based on said comparison". The preamble of each claim clearly calls for the device to identify "currency bills of different denominations". It is clear that an "indication of the identity" of a bill would necessarily include identifying the denomination of the bill. Thus, while

the PIN diodes of Roes et al. may retrieve some type of information from bills, Roes et al. does not teach or suggest that this information would be sufficient to identify the denomination of a bill.

With the respect to the Examiner's paragraph B5, as noted above, there is no disclosure of any type of housing in Roes et al., and the housing of the secondary reference Nao et al. is clearly much larger than Applicant's claimed housing. There appears to be no basis for the Examiner's further statement in this paragraph, "the prior art has already met the limitations of the dimensions of the housing".

Regarding the Examiner's paragraph B6, the spacing between the rollers 22 in FIG. 3 of Roes, et al. is between rollers on the same axis and is unrelated to the length or spacing along the path of transport, as clearly called for in applicant's claim 18.

Regarding the Examiner's paragraph B7, as to claims 7 and 21, both of these claims call for the use of master patterns which have been generated by scanning genuine bills. There is no teaching Roes et al. of the source of the "acceptance band data" stored in the EPROM 104, as described, for example, at column 7, lines 7-14 of Roes et al.

Regarding the Examiner's paragraph B8, claims 8 and 22 call for comparing laterally displaced scan patterns with laterally displaced master patterns corresponding with latterly displaced scans. This claim is directed to accommodating slight differences in side-to-side alignment from one bill to another and not merely to the use of two or more tracks or lines along which a bill is scanned as in Roes et al.

Regarding the Examiner's paragraph B9, applicant can find no teaching at the cited column 7, lines 11-15 of Roes et al. that a bill is scanned beginning a predetermined distance from a leading edge. The passage referred to reads as follows: "The currency note validator apparatus of the present invention is further provided with means for measuring the length of the note. The note length measurement is performed by timing the passage of the leading edge of the note from the scanning station to an exit sensor 88". This appears to have no relation whatever to beginning the scan at some predetermined distance inboard of a leading edge of the bill.

In view of the foregoing amendments and remarks, it is believed that the claims as presently submitted are in condition for allowance and favorable action to that end is therefore requested.

The Commissioner is authorized to charge any fees which may be required to Deposit Account No. 01-2508/CUMM139--1.

Respectfully submitted,



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